تم تحميل هذا الملف من موقع المناهج الإماراتية

تجميعة أسئلة متنوعة وفق الهيكل الوزاري منهج ريفيل

موقع المناهج ⇦ المناهج الإماراتية ⇦ الصف العاشر العام ⇦ رياضيات ⇦ الفصل الأول ⇦ ملفات متنوعة ⇦ الملف

تاريخ إضافة الملف على موقع المناهج: 2024-11-29 20:09:44

المزيد من مادة رياضيات:	ملفات ا كتب للمعلم ا كتب للطالب ا اختبارات الكترونية ا اختبارات ا حلول ا عروض بوربوينت ا أوراق عمل منهج انجليزي ا ملخصات وتقارير ا مذكرات وبنوك ا الامتحان النهائي ا للمدرس

إعداد: عصام الدبابيه

التواصل الاجتماعي بحسب الصف العاشر العام

صفحة المناهج الإماراتية على فيسبوك					
المواد على تلغرام	التربية الاسلامية	اللغة العربية	اللغة الانجليزية	الرياضيات	

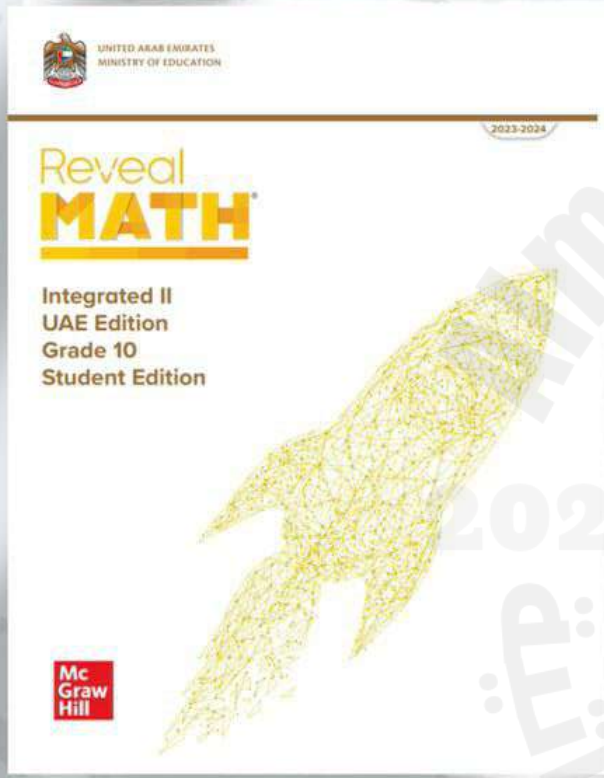
المزيد من الملفات بحسب الصف العاشر العام والمادة رياضيات في الفصل الأول

1	حل تجميعة أسئلة وفق الهيكل الوزاري منهج بريدج المسار العام
2	حل أسئلة الامتحان النهائي منهج بريدج القسم الالكتروني العام 2023-2024
3	حل ملزمة تجميعة أسئلة وفق الهيكل الوزاري منهج بريدج
4	تجميعة أسئلة صفحات الكتاب وفق الهيكل الوزاري منهج بريدج
5	تجميعة أسئلة وفق الهيكل الوزاري حسب منهج بريدج

تعليم
مؤسسة الإمارات للتعليم المدرسي
EMIRATES SCHOOLS ESTABLISHMENT

10 GEN.

MATH DEF.



ملف وفيديوهات أسئلة الهيكل

عاشر عام فصل أول .

Eot1 - Math .

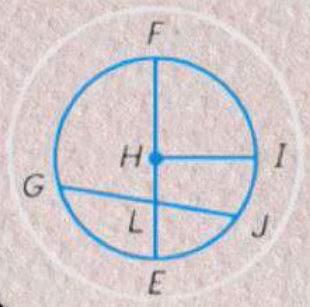
عصام الدبابيه .

Math DEF.

قم بعمل مسح للصفحة المطلوبة للوصول إلى الفيديو.

Page 1.	Page 2.	Page 3.	Page 4.	Page 5.	Page 6.
سيتم رفعه لاحقا					
Page 7.	**Page 8.**	**Page 9.**	**Page 10.**	**Page 11.**	**Page 14.**
Page 15.	**Page 16.**	**Page 17.**	**Page 18.**	**Page 19.**	**Page 20.**
		سيتم رفعه لاحقا	سيتم رفعه لاحقا		
Page 21.	**Page 22.**				

الفيديوهات التي سيتم رفعها لاحقا تدرونها في قائمة التشغيل في هذا الكود



الأسئلة الموضوعية.

10

GEN.

MCQ

15 QUESTIONS.

4 MARKS.

MATH DEF.

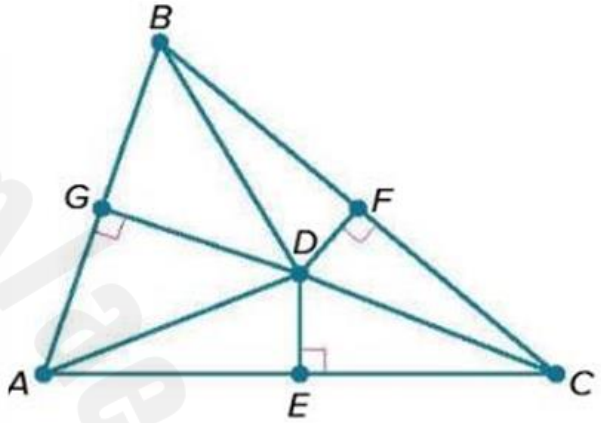
تعليم

مؤسسة الإمارات للتعليم المدرسي
EMIRATES SCHOOLS ESTABLISHMENT

عصام الدبايبه.

1. Prove theorems and apply geometric methods to solve and design problems using the perpendicular bisectors of triangles. MCQ Page 5.

Find BF if D is the circumcenter of $\triangle ABC, AC = 9, DE = 1.83 \; and \; DF = 1.53$



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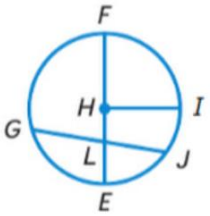
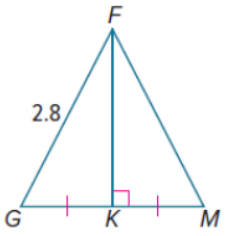
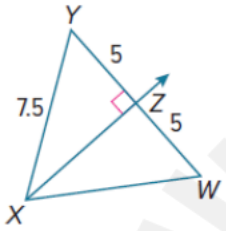


Find each measure.

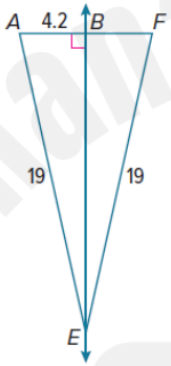
1. *FM*



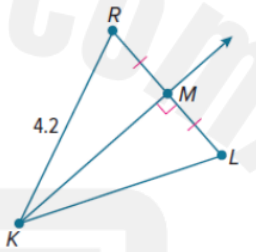
2. *XW*



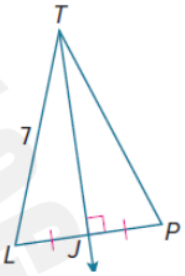
3. *BF*



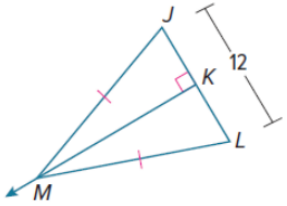
4. *KL*



5. *TP*



6. *KL*



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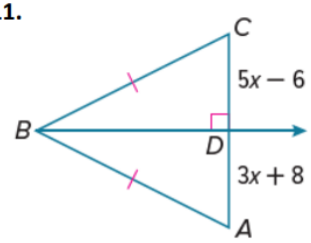

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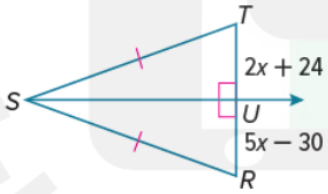
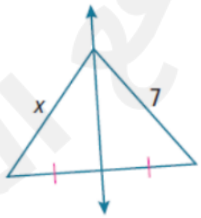
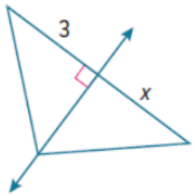


Determine whether there is enough information given in each diagram to find the value of x. if there is, find the value of x. if there is not , explain what need to be given.

13.



14.



3. Prove and apply the triangle inequality theorem. MCQ Page 43.

Is it possible to form a triangle with the given side lengths? If not, explain why not.

1. 9, 12, 18	**2.** 8, 9, 17	**3.** 14, 14, 19	**4.** 23, 26, 50
5. 32, 41, 63	**6.** 2.7, 3.1, 4.3	**7.** 0.7, 1.4, 2.1	**8.** 12.3, 13.9, 25.2

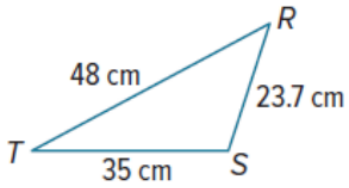
Find the range for the measure of the third side of a triangle given the measures of two sides.

9. 6 ft and 19 ft	**10.** 7 km and 29 km	**11.** 13 in. and 27 in.	**12.** 18 ft and 23 ft

4. Prove and apply theorems about inequalities in on triangle. MCQ Page 31.

List the angles and sides of each triangle in order from smallest to largest.

6.



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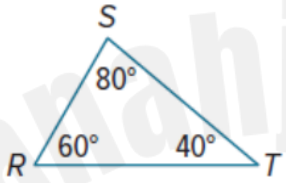

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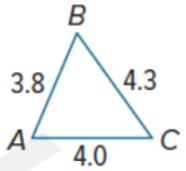
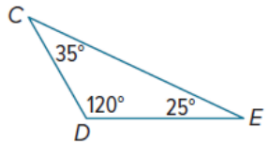


9.



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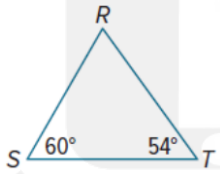
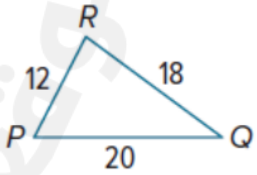
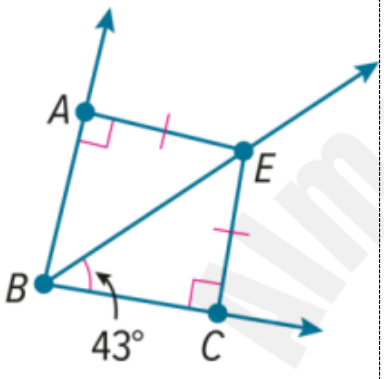


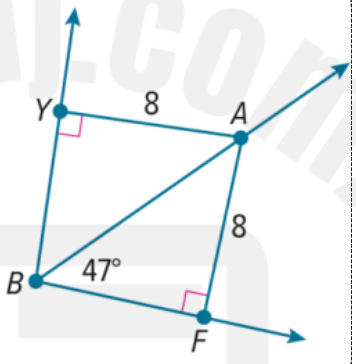
11.



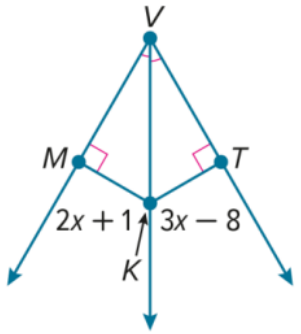
1. $m\angle ABE$



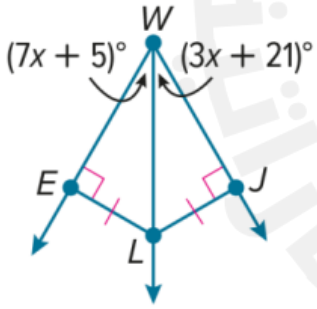
2. $m\angle YBA$



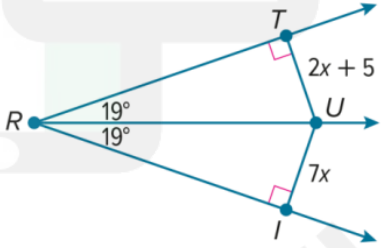
3. MK



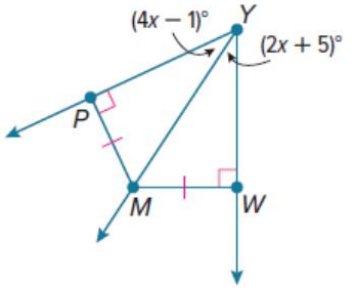
4. $m\angle EWL$

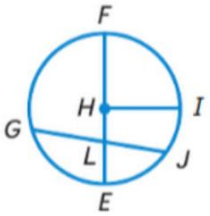


5. IU



6. $m\angle MYW$

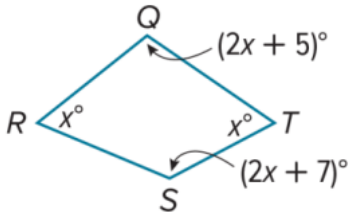




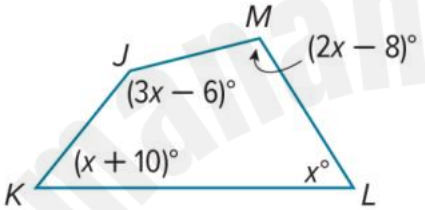
6. Prove and use the polygon interior angles sum theorem. MCQ Page 63.

Find the measure of each interior angle.

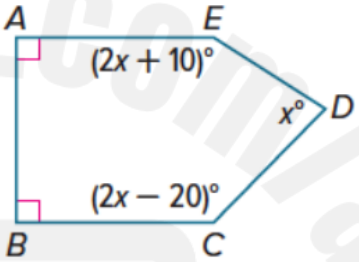
1.



2.



3.



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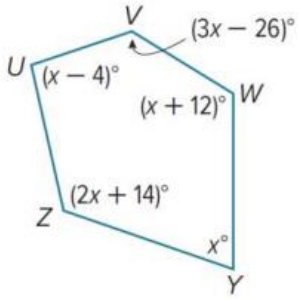
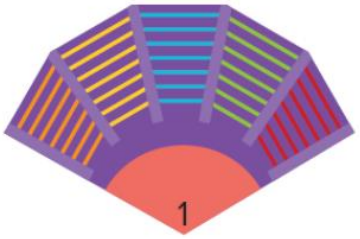


5. In the Uffizi gallery in Florence, Italy, there is a room built by Buonetalenti called the Tribune. This room is shaped like a regular octagon. What is the measure of the angle formed by two consecutive walls of the Tribune.

6. **THEATER** A theater floor plan is shown.

. The upper five sides are part of a regular dodecagon. Find $m\angle 1$.

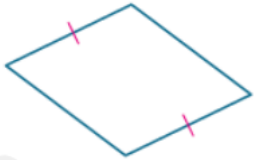


7. Use the tests for parallelograms to detemine whetehr quadrilaterlas are parallelograms. MCQ Page 79.

1.

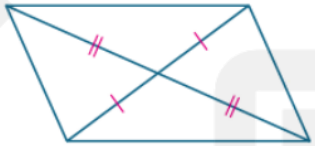
2.

3.



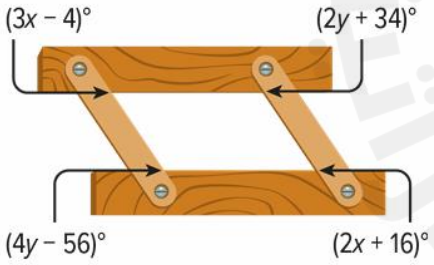
4.

5.

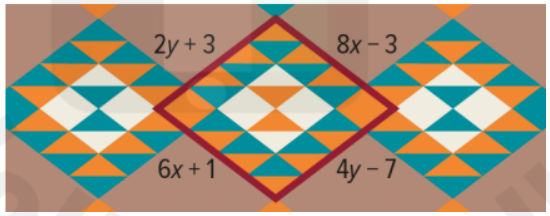


6.

Find the values of x and y so that the trays and hinges of the orgnizer form a parallelogram.

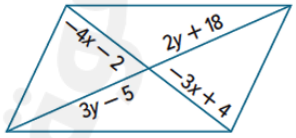


Many native American rugs and blankets incorporate parallelograms into the designs. Find the values of x and y so that the quadrilaterl shown is a parallelogram

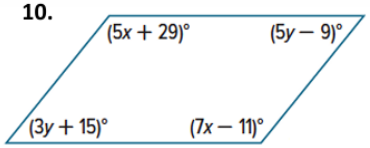


Find the value of x so that each quadrilateral is parallelogram.

9.



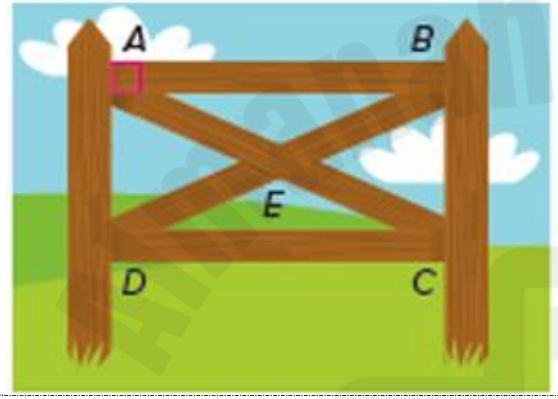
10.



8. Recognize and apply the properties of rectangles. MCQ Page 87

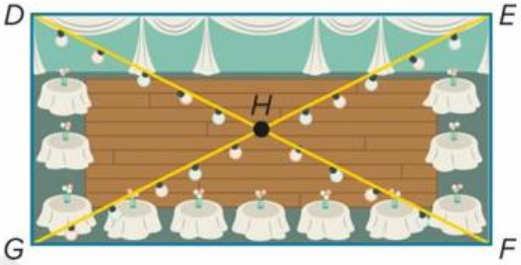
1. X-braces are also used to provide support in rectangular fencing. If $AB = 6\ feet, AD = 2feet, and\ m\angle DAE = 65$. Find each measure. Round to the nearest tenth, if necessary.

a.	BC
b.	DB
c.	$m\angle CEB$
d.	$m\angle EDC$

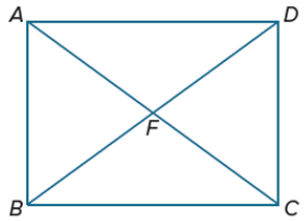


2. The prom committee is decoration the venue for prom and wants to hang lights above the diagonals of the rectangular room. $if\ DH = 44.5\ feet, EF = 39\ feet, and\ m\angle GHF = 128$. Find each measure.

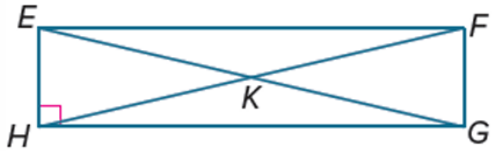
a.	DG
b.	GE
c.	$m\angle EHF$
d.	$m\angle HEF$



3. Quadrilateral ABCD is a rectangle. If $m\angle ADB = 4x + 8\ and\ m\angle DBA = 6x + 12$. Find the value of x.



4. Quadrilateral EFGH is a rectangle. Use the given information to find each measure.



1. $if\ m\angle FEG = 57$, find $m\angle GEH$
2. $if\ m\angle HGE = 13$, find $m\angle FGE$
3. $if\ FK = 32$, find EG
5. $find\ m\angle HEF + m\angle EFG$
6. $if\ EF = 4x - 6\ and\ HG = x + 3$ find EF.

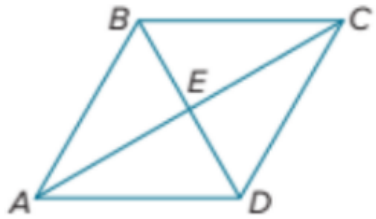
9. Recognize and apply the properties of rhombi and squares. MCQ Page 95.

a. Quadrilateral ABCD is a rhombus. Find each value or measure.

1. If $m\angle ABD = 60$, Find $m\angle BDC$

2. If $AE = 8, find\ AC.$

3. $if\ AB = 26\ and\ BD = 20, find\ AE.$



4. $find\ m\angle CEB$

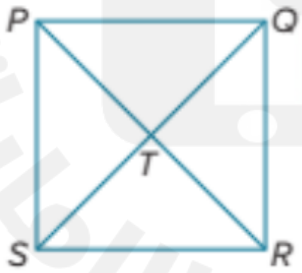
5. $if\ m\angle CBD = 58,$ Find $m\angle ACB$

6. $if\ AE = 3x - 1\ and\ AC = 16, find\ x.$

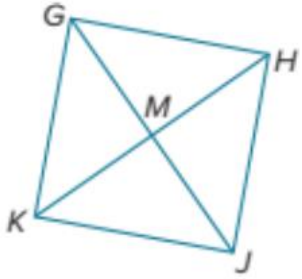
7. $if\ m\angle CDB = 6y$ and $m\angle ACB = 2y + 10,$ Find the value of y.

8. $if\ AD = 2x + 4\ and\ CD = 4x - 4, find\ the\ value\ of\ x.$

b. $PQRS$ is a square. If $PR = 42$, Find TR.



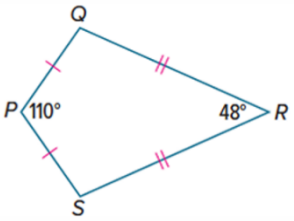
c. $GHJK$ is a square. If $KM = 26.5$, Find KH.



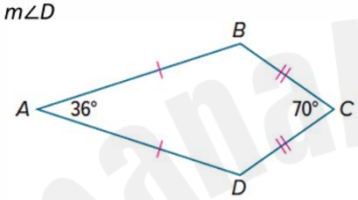
10.Apply the properties of kites to solve real-world. MCQ Page 106.

1. Find each measure in the kites.

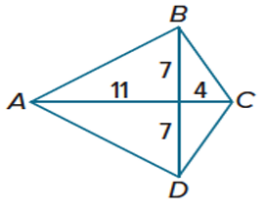
13. $m\angle Q$



14. $m\angle D$



2. Quadrilateral ABCD is a kite.



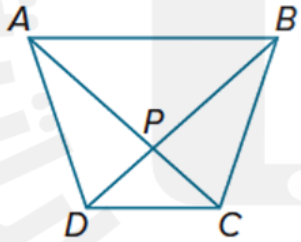
a. find BC. Write your answer in simplest radical form .

b. Find the perimeter of the kite ABCD. Round your answer to the nearest tenth, If necessary.

ABCD is a trapezoid.

If $AC = 3x - 7$ *and* $BD = 2x + 8$

Find the value of x so that ABCD is isosceles.

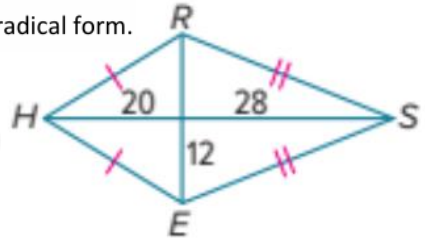


find the value of x so that $ABCD$ is isosceles.

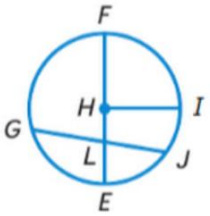
If $m\angle ABC = (4x + 11)^\circ$ and $m\angle DAB = (2x + 33)^\circ$

16. **REASONING** Quadrilateral *HRSE* is a kite.

a. Find *RH*. Write your answer in simplest radical form.



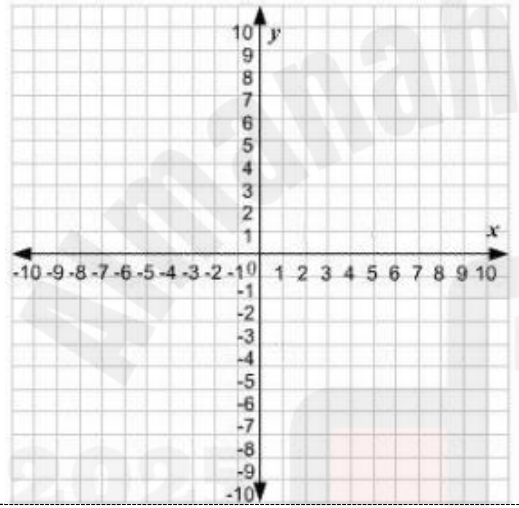
b. Find the perimeter of kite *HRSE*. Round your answer to the nearest tenth, if necessary.



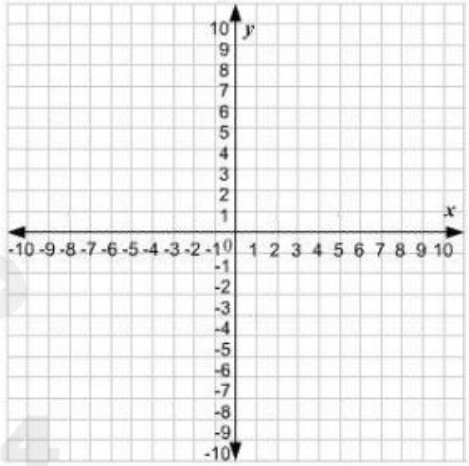
11.Represent dilations as functions and find the scale factors of dilations. MCQ Page 119, 120.

For each set of triangle vertices, find and graph the coordinates of the vertices of the image after a dilation of the triangle by the given scale factor.

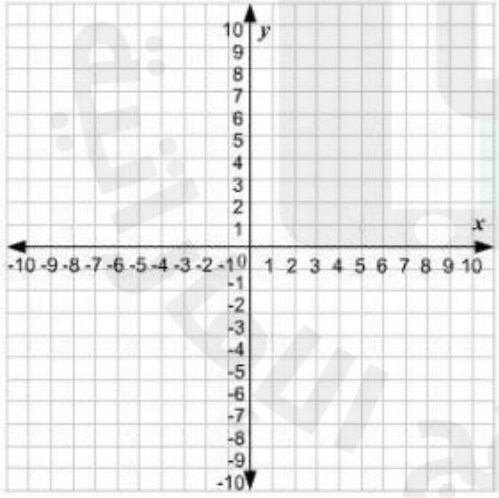
a. $J(-8,0), K(-4,4), L(-2,0)$ $, k = 0.5$



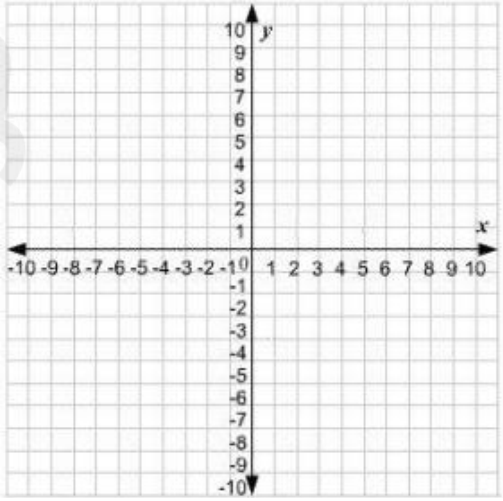
b. $S(0,0), T(-4,0), V(-8,-8)$ $, k = 1.25$

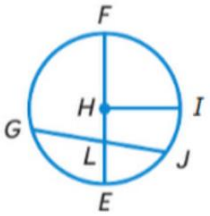


c. $A(9,9), B(3,3), C(6,0)$ $k = \frac{1}{3}$



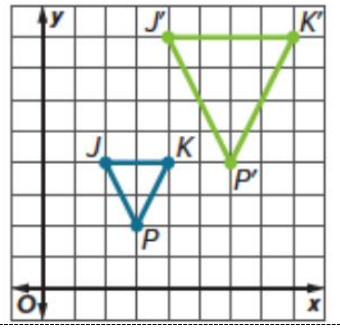
d. $D(4,4), F(0,0), G(8,0)$ $, k = 0.75$



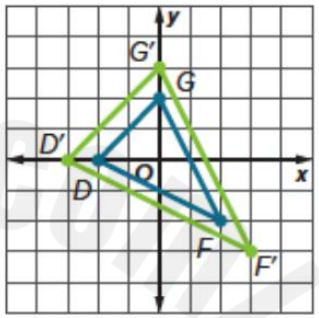


Find the scale factor of the dilation.

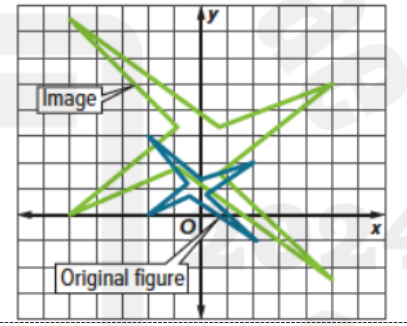
10. $\triangle J'K'P'$ is the image of $\triangle JKP$.



11. $\triangle D'F'G'$ is the image of $\triangle DFG$.

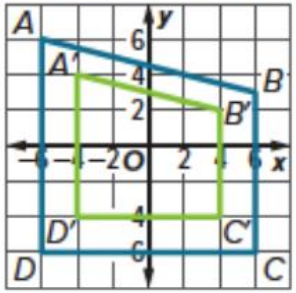


12. Tyrone drew a logo and a dilation of the same logo on the coordinate plane. What is the scale factor of the dilation?

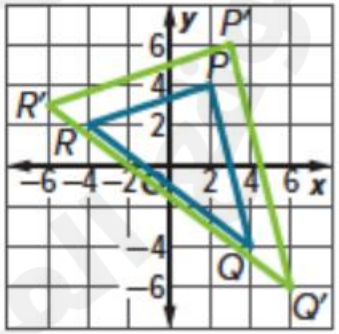


Find the scale factor of the dilation.

17. $A'B'C'D'$ is the image of $ABCD$.

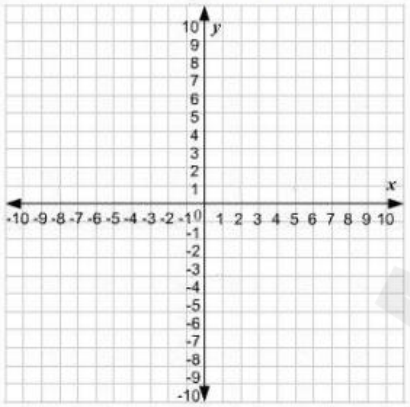


18. $\triangle P'Q'R'$ is the image of $\triangle PQR$.

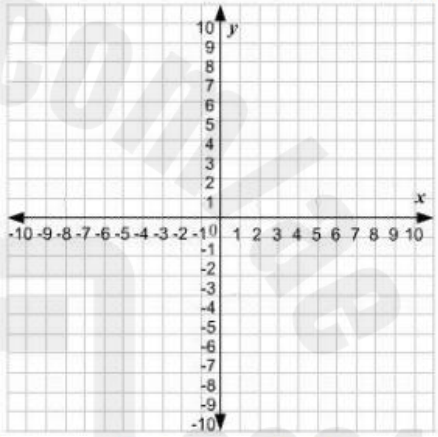


Graph the image of each polygon with the given vertices after a dilation centered at the origin with the given scale factor.

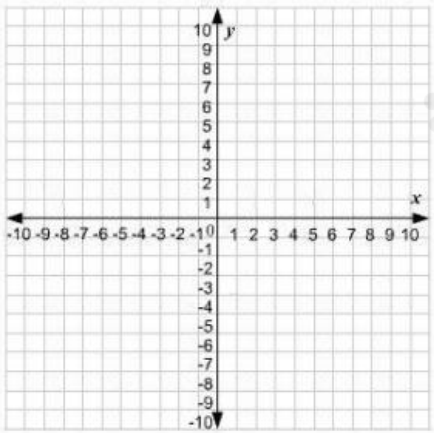
13. $F(-10, 4)$, $G(-4, 4)$, $H(-4, -8)$, $k = 0.25$



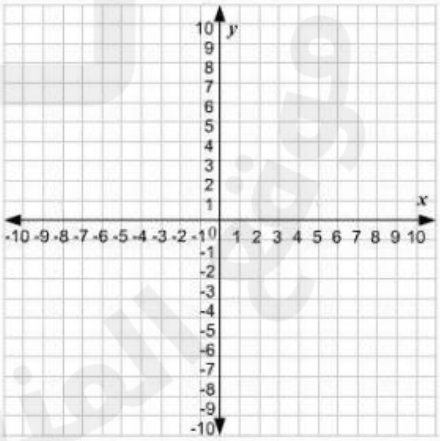
14. $X(2, -1)$, $Y(-6, 4)$, $Z(-2, -5)$, $k = \frac{5}{4}$

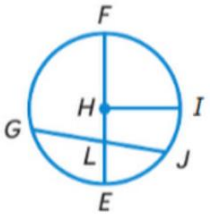


15. $M(4, 6)$, $N(-6, 2)$, $P(0, -8)$, $k = \frac{3}{4}$



16. $R(-2, 6)$, $S(0, -1)$, $T(-5, 3)$, $k = 1.5$

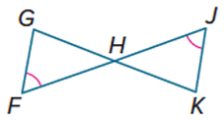




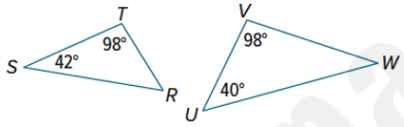
12. Use the AA similarity criterion to solve problems and prove triangles similar. MCQ Page 133, 134.

Determine whether each pair of triangles is similar. Explain your reasoning.

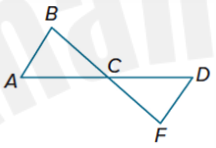
1.



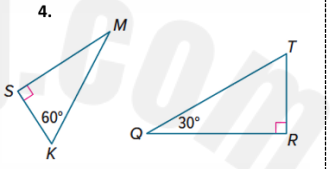
2.



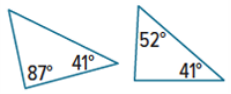
3.



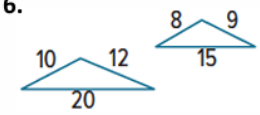
4.



5.



6.

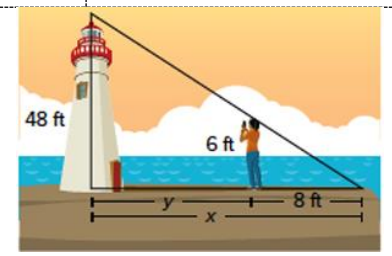


7. A cell phone tower casts a shadow that is 100 feet long. At the same time, lia stands near the tower and casts a shadow that is 3 feet 4 inches long. If Lia is 4 feet 6 inches tall, how tall is the cell phone tower?

8.

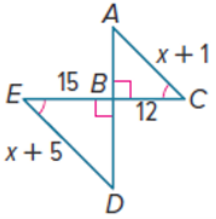
a. Find x.

b. Find y.

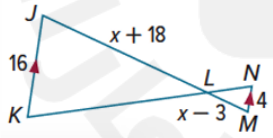


9. Identify the similar triangles. then find each measure.

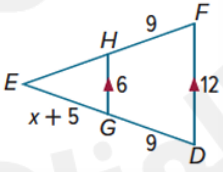
9. *AC*



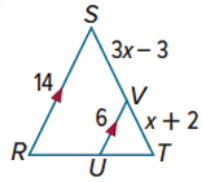
10. *JL*



11. *EH*



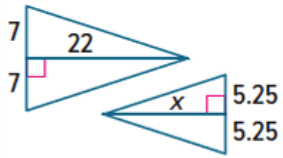
12. *VT*



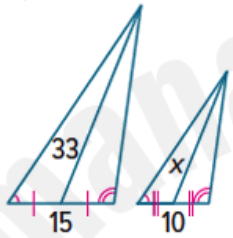
13. Solve problems and prove theorems about parts of similar triangles by using triangle similarity. MCQ Page 153.

Each pair of triangles is similar. Find the value x.

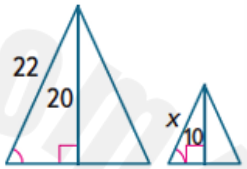
1.



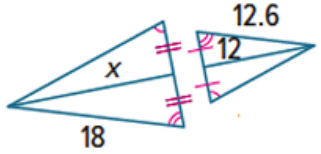
2.



3.

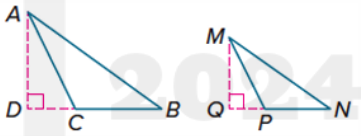


4.

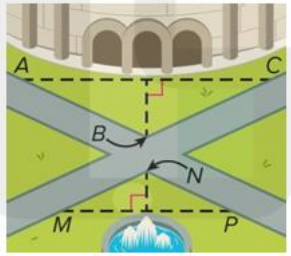


5. If $\triangle RST \sim \triangle EFG$, SH is an altitude of $\triangle RST$, FJ is an altitude of $\triangle EFG$, $ST = 6$, $SH = 5$, and $FJ = 7$, find FG.

6. If $\triangle ABC \sim \triangle MNP$, AD is an altitude of $\triangle ABC$, MQ is an altitude of $\triangle MNP$, $AB = 24$, $AD = 14$, and $MQ = 10.5$, find MN.

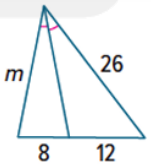


7. if $AC = 50, yards, MP = 35$
The fountain is 5 yards from the intersection.
About how far the intersection is the stadium Entrance.

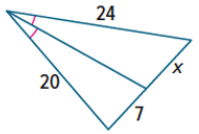


Find the value of each variable to the nearest tenth.

8.

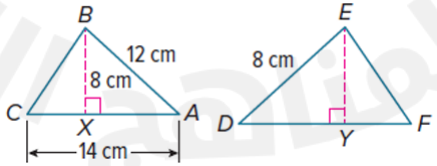


9.



For Exercises 10 and 11, $\triangle ABC \sim \triangle DEF$.

10. Find the length of XC to the nearest tenth.



11. Find the length of EY to the nearest tenth.

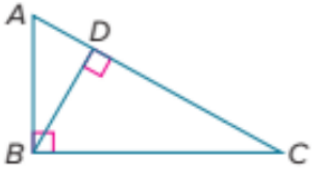
14. Use similarity criteria for triangles and geometric means to solve problems and to probe relationships in geometric figures. Page 165.

Find the geometric mean between each pair of numbers.

$a.\ 4\ and\ 6$	$b.\ \frac{1}{2}\ and\ 2$	$c.\ 4\ and\ 25$
$d.\ 12\ and\ 20$	$e.\ 17\ and\ 3$	$d.\ 3\ and\ 24$

Write a similarity statement identifying the three similar right triangles in each figure.

7.



8.

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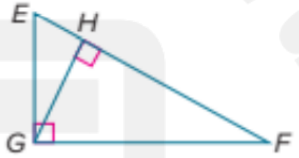

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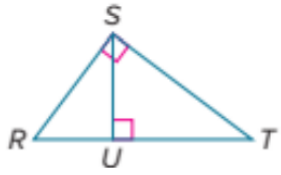
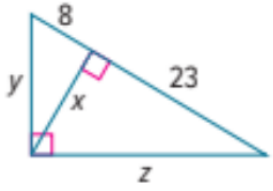


Find the value of x, y, z.

11.



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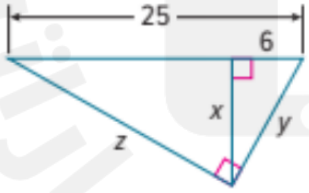

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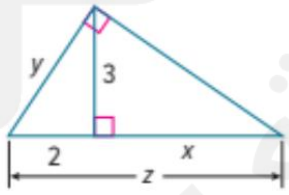

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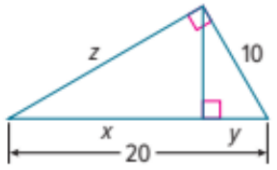


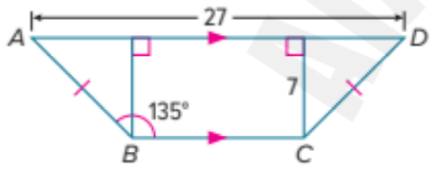
15. understand that by similarity, side ratios in 45, -45, 90 right triangles are related to the angles in the triangles . MCQ page 185, 186.

1. $\triangle XYZ$ is a 45°, 45°, 90° triangle with right angle Z. Find the coordinates of X in Quadrant I for $Y(-1,2) and\ Z(6,2)$

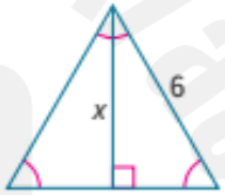
2. $\triangle EFG$ is a 30°, -60°, -90° triangle with $m\angle 90°$. Find the coordinates of E in Quadrant III for $F(-3,-4) and\ G(-3,2)$. $\overline{FG}$ is the longer leg.

3. The ratio of the measure of the angles of a triangle is 1:2:3. The length of the shortest side is 8. What is the perimeter of the triangle ?

4. Find the perimeter of quadrilateral ABCD. Round your answer to the nearest tenth.

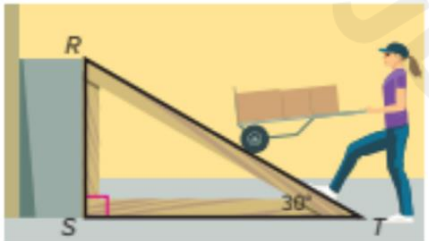


5. Who is correct in finding x.



6. Why are some triangles considered special?

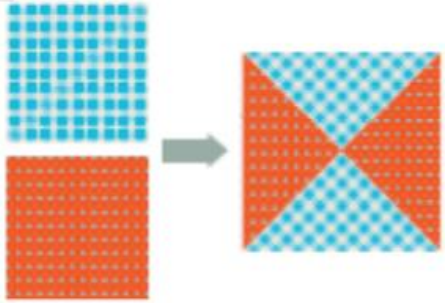
7. Melody is in charge of building a ramp for a loading dock. According to the plan, the ramp makes a 30° angle with the ground. The plan also states that $\overline{ST}$ is 4 feet longer than $\overline{RS}$. Use a calculator to find the lengths of the three sides of the ramp to the nearest thousandth.



8. Liling is making a quilt. She starts with two small squares of material and cuts them along the diagonal. Then she arranges the four resulting triangles to make a large square quilt block. She wants the large quilt block to have an area of 36 square inches.

a. What side length should Lilling use for the two small squares of material? Explain ?

b. Explain any assumption that you make to answer part a.



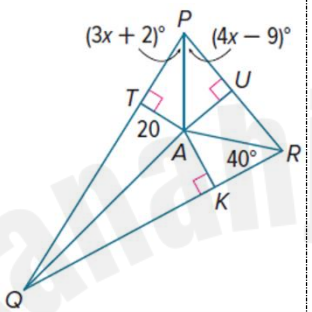
9.Draw a rectangle that has diagonal twice as long as its width. Then write an equation to find the length of the rectangle.

16. prove theorems and solve problems about angle bisectors. FRQ

***A* is the incenter of $\triangle PQR$. Find each measure.**

7. $m\angle ARU$

8. *AU*

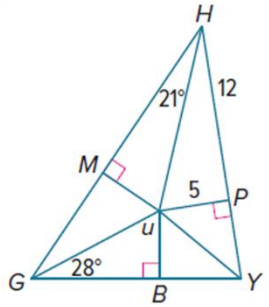


***U* is the incenter of $\triangle GHY$. Find each measure.**

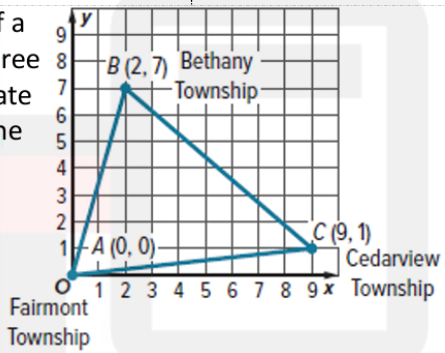
9. $m\angle UGM$

10. $m\angle PHU$

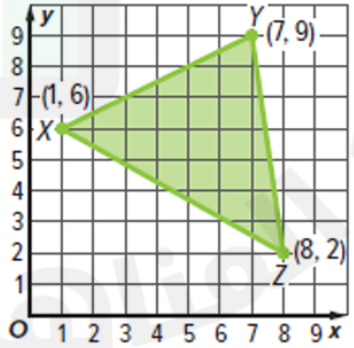
11. *HU*

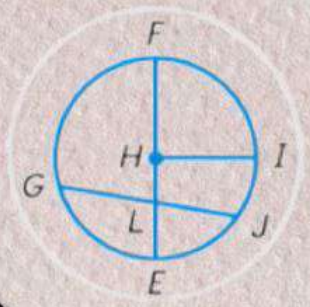


12. CITY PLANNING City planning officials want the location of a new electric car charging station to be equidistant from the three townships shown on the coordinate plane. Find the approximate location of the charging station so that it is equidistant from the roads connecting the townships of Fairmont, Bethany, and Cedarview.



13. SCHOOL The alumni foundation will donate a new fountain for the high school's courtyard. The entrances to the courtyard are located at points *X*, *Y*, and *Z*. Find the approximate location of the center of the fountain so that it is equidistant from the sides of the courtyard.





الأسئلة المقالية.

5-10 MARKS.

10

GEN.

FRQ

5 QUESTIONS.

MATH DEF.

تعليم

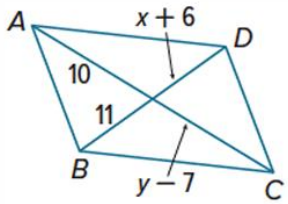
مؤسسة الإمارات للتعليم المدرسي
EMIRATES SCHOOLS ESTABLISHMENT

عصام الدبايبه.

17. Prove and use theorems about the diagonals of parallelograms. FRQ page 72.

Find the value of each variable in each parallelogram.

9.



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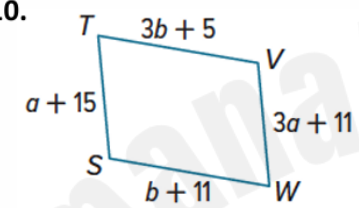

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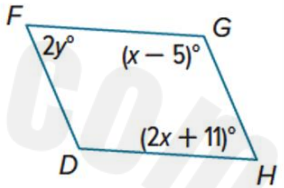

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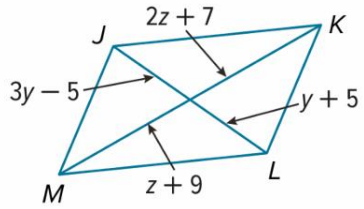
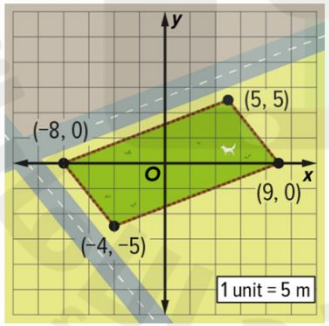
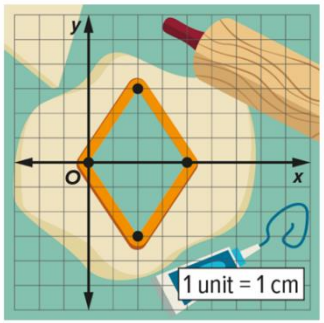
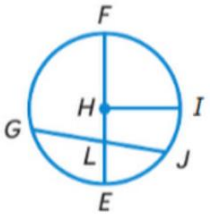


13. A new dog park is being designed by a city planner. The park is enclosed by a fence shaped like a parallelogram. What is the area and perimeter of the dog park? Round your answer to the nearest hundredth, If necessary.



14. Breelyn is making cookies using a cookie cutter in the shape of parallelogram. What are the perimeter and area of each cookie? Explain any assumptions that you make. Round your answer to the nearest hundredth, if necessary.

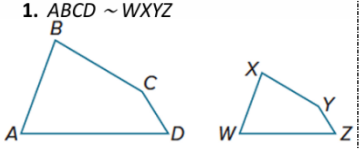




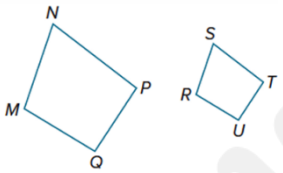
18. Determine whether two figures are similar. FRQ page 127, 128.

List all pairs of congruent angles, and write a proportion that relates the corresponding sides for each pair of similar polygons.

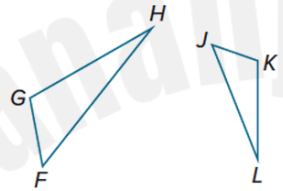
1. $ABCD \sim WXYZ$



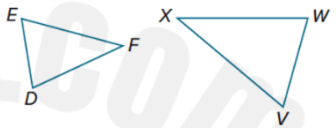
2. $MNPQ \sim RSTU$



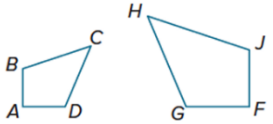
3. $\triangle FGH \sim \triangle JKL$



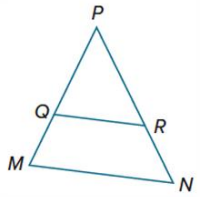
4. $\triangle DEF \sim \triangle VWX$



5. $ABCD \sim FGHJ$

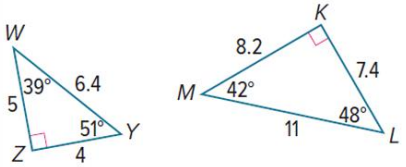


6. $\triangle MNP \sim \triangle QRP$



Determine whether each pair of figures I similar. If so, find the scale factor .

7.



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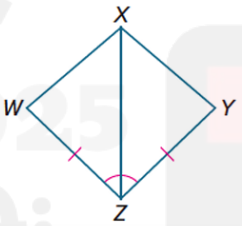

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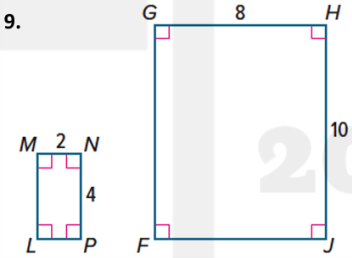

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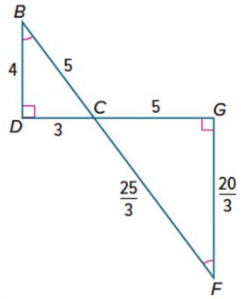
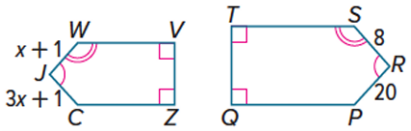


Each pair of polygons is similar. Find the value of x.

11.



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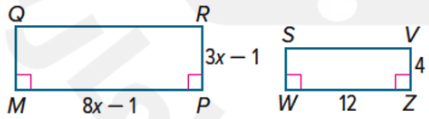

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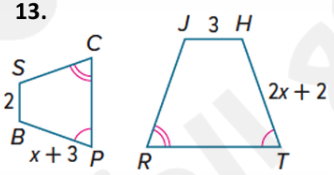

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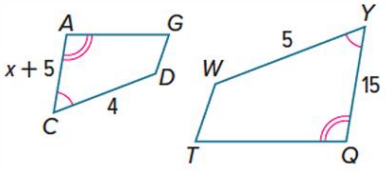
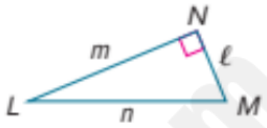


19. solve problems by using the trigonometric ratios for acute angles FRQ page 191, 192.

1. Find $\sin L$, $cosL$, $\tan L$, $\sin M$, $\cos M$, $\tan M$
Express each ratio as a fraction and as a decimal to the nearest hundredth.

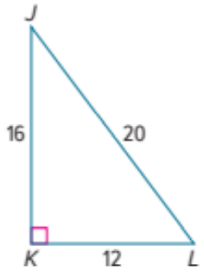
a. $l = 15, m = 36,$
$n = 39$

b. $l = 12, m = 2\sqrt{3},$
$n = 24$



2, Find $\sin R$, $\cos R$, $\tan R$, $\sin S$, $\cos S$, $\tan S$
Express each ratio as a fraction and as a decimal to the nearest hundredth.

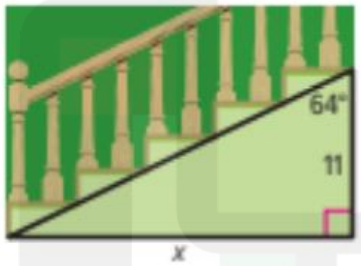
3. Find $\sin J$, $\cos J$, $\tan J$, $\sin L$, $\cos L$, $\tan L$
Express each ratio as a fraction and as a decimal to the nearest hundredth.

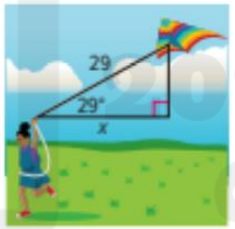


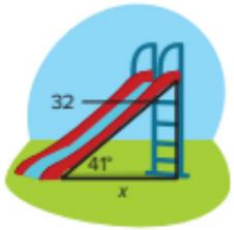
4. Use a special right triangle to express each trigonometric ratio as a fraction and a decimal to the nearest hundredth if necessary.

a. $\sin 30$	b. $\tan 45$
c. $\cos 60$	d. $\sin 60$
e. $\tan 30$	f. $\cos 45$

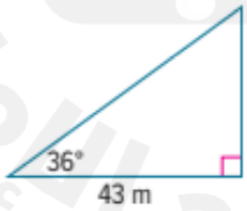
5. find the value of x.







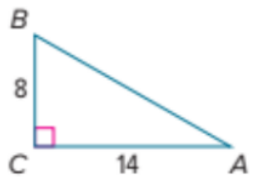
6. What is the height of the formation to the nearest meter.



7. how heigh above the first floor is the second floor ?

Use a calculator to find $m\angle B$ and $m\angle T$ to the nearest tenth.

16.



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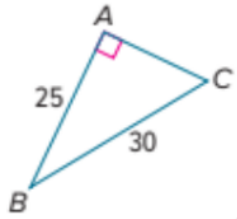

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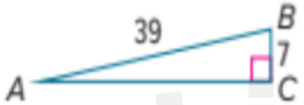

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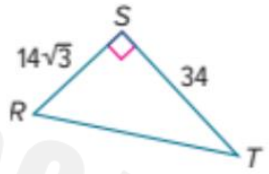
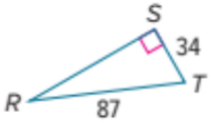


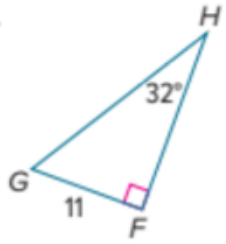
20.

21.



Solve each right triangle. Round side measures to the nearest tenth and angle measure to the nearest degree .

22.



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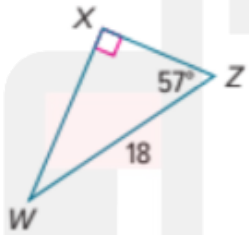

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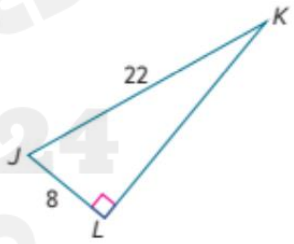

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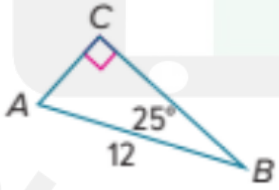

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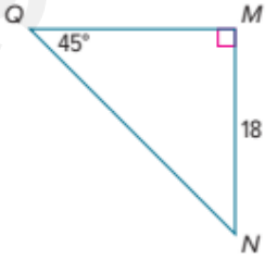
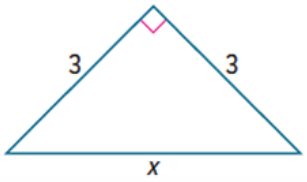


Find the value of *x*.

1.



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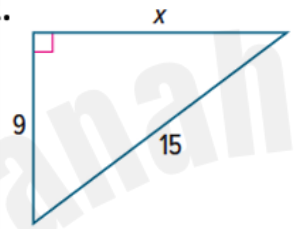

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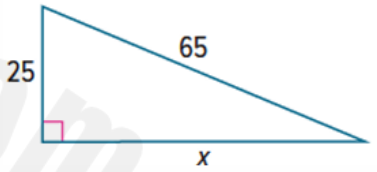

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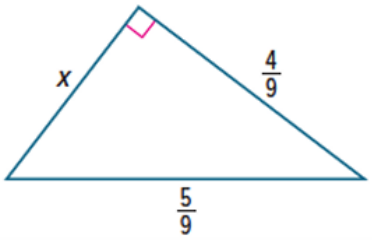

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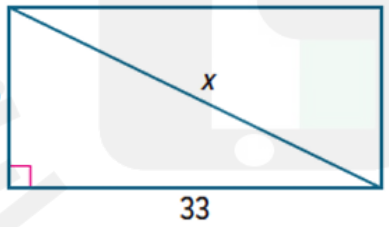

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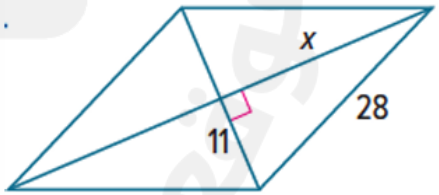
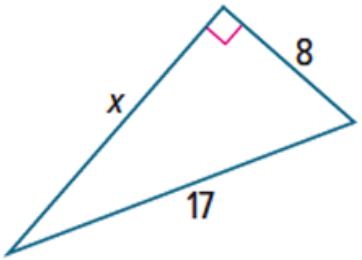


Use a Pythagorean Triple to find the value of *x*.

7.



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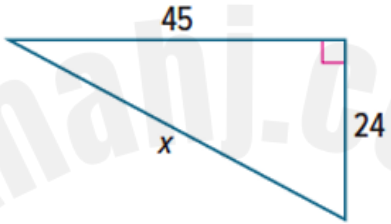

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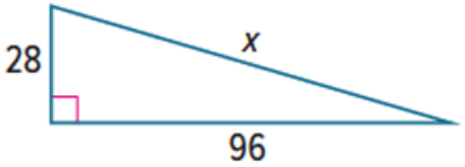

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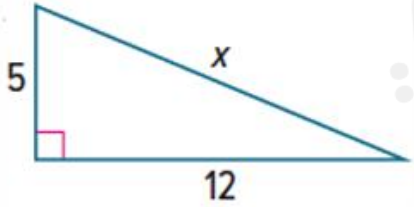

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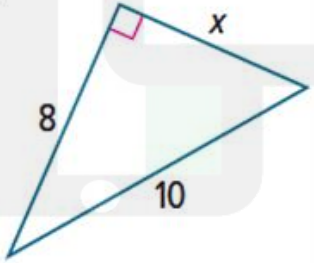
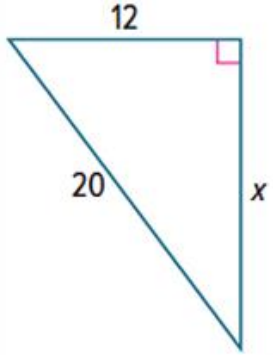
12.